

DETAILED ACTION

1. This Office Action is a response to communications dated 02/19/08. Claims 1-28 are pending in the application.

Priority

2. This application is claiming the benefit of prior-filed international application No. PCT/EP99/06505 under 35 U.S.C. 120, 121, or 365(c). Copending between the current application and the prior application is required. Since the applications are not copending, the benefit claim to the prior-filed international application is improper. Applicant is required to delete the reference to the prior-filed application from the first sentence(s) of the specification, or the application data sheet, depending on where the reference was originally submitted, unless applicant can establish copendency between the applications.

Claim Objections

3. Claim 1 is objected to because of the following informalities:

Line 1, "comprising" should be changed to --comprising:--.

Line 5, "technologies" should be changed to --technologies--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per base claim 1, it calls for "*providing for performing switching between an incoming and outgoing of a switching network element,*" in lines 2-3. It is unclear what is being provided for performing switching. In a response to this Office Action, perhaps, the Applicants should further amend the claim to include "*providing a switch for performing*"

As per dependent claim 2, it recites the limitation "said call resources" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Dependent claims 3-13 variously depend from their indefinite parent claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Tilander (USP 7,035,268).

Regarding **claim 1**, in accordance with Tilander reference entirety, Tilander teaches method, comprising:

providing a switch (*Fig. 1; element 1*) for performing switching between an incoming side (*to/from subscr. A*) and an outgoing side (*to/from subscr. B*) of a switching network element (*Fig. 1; elements 1-8*) in a telecommunication network (*Fig. 1*) including a plurality of services employing differing switching technologies (*col. 5, lines 1-11, switching unit 1 and its function to include providing switching technology independent resources for call control application are disclosed*),

allocating technology-independent identifications (*logical identifications*) to a call resource of said switching network element, request by a received call (*call resource management unit 2 and its functions are described at col. 5, lines 12-25 and thereafter*),

defining, according to said employed one of said differing switching technologies, an incoming logical leg and an outgoing logical leg for said received call by using said allocated identifications for said incoming side and said outgoing side, respectively (*col. 5, lines 54-67; col. 7, lines 33-45 and thereafter, logical service management unit 4 and its functions are disclosed*), and

controlling said switching network element for said received call based on said incoming logical leg and said outgoing logical leg (*col. 5, lines 1-5, lines 54-67 and thereafter, switch connection control unit 6 and its functions are disclosed*).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), Tilander further discloses wherein said call resource comprise at

least one of a transcoding service, a macro diversity combining service, an AAL2 switching service, a tone generating service, an echo canceling service, a compression service and a conference call service (Fig. 8 and col. 8, lines 54-61 and thereafter).

Regarding **claim 3**, in addition to features recited in base claim 1 (see rationales discussed above), Tilander further discloses defining a plurality of incoming logical legs for a through connection to an outgoing logical leg (*Fig. 8 and col. 8, lines 54-61 and thereafter*).

Regarding **claim 4**, in addition to features recited in base claim 1 (see rationales discussed above), Tilander further discloses providing for at least one of said incoming logical leg and/or said outgoing logical leg comprise a plurality of subconnections needed for a whole through-connection between said incoming side and said outgoing side (*Fig. 8 and col. 8, lines 54-61 and thereafter*).

Regarding **claim 5**, in addition to features recited in base claim 4 (see rationales discussed above), Tilander further discloses wherein said plurality of subconnections depend on services requested by said received call (*Fig. 8 and col. 8, lines 54-61 and thereafter*).

Regarding **claim 6**, in addition to features recited in base claim 1 (see rationales discussed above), Tilander further discloses controlling a reservation of service resources and a cross-connection handling between service points base on said incoming and outgoing logical legs (*Figs. 5-8 and col. 8, lines 16-61 and thereafter*).

Regarding **claim 7**, in addition to features recited in base claim 6 (see rationales discussed above), Tilander further discloses reserving resources with the same traffic

parameters as reserved for a previous service in a service chain of a logical leg (*Figs. 5-8 and col. 8, lines 16-61 and thereafter*).

Regarding **claim 8**, in addition to features recited in base claim 4 (see rationales discussed above), Tilander further discloses wherein said plurality of subconnections comprise an AAL2 connection and/or an ATM connection (*ATM switch is discussed at col. 1, lines 49-61, col. 4, line 55 and RNC is depicted in Fig. 9 and disclosed at col. 8, line 62 to col. 9, line 9 and AAL2 used in RNC is discussed at col. 1, lines 49-61. In addition, virtual path connection and virtual channel connection, commonly known as ATM address, are discussed at col. 6, lines 37-42*).

Regarding **claim 9**, in addition to features recited in base claim 1 (see rationales discussed above), Tilander further discloses managing a signal processing resource for providing service functions based on said incoming and outgoing logical legs (*col. 7, lines 33-45 and thereafter*).

Regarding **claim 10**, in addition to features recited in base claim 1 (see rationales discussed above), Tilander further discloses storing data of said incoming and outgoing logical legs in a memory (*see Fig. 1 and logical resource management unit 3*).

Regarding **claim 11**, in addition to features recited in base claim 10 (see rationales discussed above), Tilander further discloses permanently storing a leg identification information and creating a leg in a start-up phase according to the defined services (*col. 5, lines 32-43 and thereafter*).

Regarding **claim 13**, in addition to features recited in base claim 10 (see rationales discussed above), Tilander further discloses refreshing said incoming and outgoing logical legs based on a refresh request (col. 5, *lines 63-67*).

Regarding **claim 14**, in accordance with Tilander reference entirely, Tilander shows switching network element (Fig. 1) configured to perform switching between an incoming side (Fig. 1; *To/From Subsr. A*) thereof and an outgoing side (Fig. 1; *To/From Subsr. B*) thereof in a telecommunication network (Fig. 1), said switching network element (Fig. 1) comprising:

logical resource interface (1) configured to allocate an access technology-independent identification (*logical identification*) to a call resource requested by a received call (col. 4, *line 53-67 and thereafter, it is disclosed switching unit 1*); and

a leg control (3 and 4) configured to control a switching operation of said switching network element based on an incoming logical leg and an outgoing logical leg defined by the identifications allocated by said logical resource interface to requested cell resources at said incoming side and said outgoing side, respectively (col. 5, *lines 26-61, and thereafter, it is disclosed logical resource management unit 3 and logical service management unit 4*).

Regarding **claim 15**, in addition to features recited in base claim 14 (see rationales discussed above), Tilander further shows a memory (4) configured to store data of said incoming and outgoing logical legs (col. 5, *lines 54-61 and thereafter*).

Regarding **claim 16**, in addition to features recited in base claim 14 (see rationales discussed above), Tilander further discloses wherein said leg control is

configured to mark and store a registration information of a leg to a client who created the leg (*col. 5, lines 54-61 and thereafter*).

Regarding **claim 17**, in addition to features recited in base claim 16 (see rationales discussed above), Tilander further discloses wherein said leg control is configured to perform control such that only the registered owner of a leg is allowed to request operations concerning this particular leg (*col. 5, lines 54-61 and thereafter*).

Regarding **claim 18**, in addition to features recited in base claim 14 (see rationales discussed above), Tilander further discloses a connection control (7) configured to control a switching means in response to an output of said leg control (*col. 7, lines 56-61 and thereafter*).

Regarding **claims 19-20**, in addition to features recited in base claim 18 (see rationales discussed above), Tilander further discloses wherein said connection control comprise an AAL2 connection and/or an ATM connection (*ATM switch is discussed at col. 1, lines 49-61, col. 4, line 55 and RNC is depicted in Fig. 9 and disclosed at col. 8, line 62 to col. 9, line 9 and AAL2 used in RNC is discussed at col. 1, lines 49-61. In addition, virtual path connection and virtual channel connection, commonly known as ATM address, are discussed at col. 6, lines 37-42*).

Regarding **claim 21**, in addition to features recited in base claim 14 (see rationales discussed above), Tilander further discloses further comprising a signal processing control (6) configured to control an allocation of signal processing resources to service functions based on an output of said leg control (*col. 5, lines 1-5 and thereafter*).

Regarding **claim 22**, in addition to features recited in base claim 14 (see rationales discussed above), Tilander further discloses wherein said service functions comprise at least one of transcoding, tone generation, echo canceling, compression, announcements, conference call services and **macro diversity combining services** (*Fig. 8 and col. 8, lines 54-61 and thereafter*).

Regarding **claim 23**, in addition to features recited in base claim 14 (see rationales discussed above), Tilander further discloses wherein said leg control is configured to determine necessary subconnection end points based on services required for said incoming and outgoing side according to said received call (*Fig. 8 and col. 8, lines 54-61 and thereafter*).

Regarding **claim 24**, in addition to features recited in base claim 19 (see rationales discussed above), Tilander further discloses wherein said ATM connection leg control is configured to supply subconnection end points to said leg control based on requested services required for said incoming and outgoing side according to said received call (*Fig. 8 and col. 8, lines 54-61 and thereafter*).

Regarding **claim 25**, in addition to features recited in base claim 21 (see rationales discussed above), Tilander further discloses wherein said leg control is configured to use said signal processing resource control in order to request service end points for transcoding **or macro diversity services** needed for said received call (*Fig. 8 and col. 8, lines 54-61 and thereafter*).

Regarding **claim 26**, in addition to features recited in base claim 21 (see rationales discussed above), Tilander further discloses wherein said processing control

is configured to reserve resources with same traffic parameters as were received for a previous service in a service chain of a logical leg (see *Fig. 6 and its corresponding description at col. 8, lines 26-53*).

Regarding **claim 28**, in addition to features recited in base claim 14 (see rationales discussed above), Tilander further discloses wherein said switching element is a radio network controller or an interworking network element of a third generation mobile network (*Fig. 8 and col. 8, lines 50-53*).

Response to Arguments

6. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Kinnunen et al (USP 7,272,142).

Enerothe et al, Applying ATM/AAL2 as a Switching Technology in Third-Generation Mobile Access Networks, IEEE, 11 pages, 1999.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frank Duong/
Primary Examiner, Art Unit 2616
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